Claims

[c1] 1. A package method for an organic electro-luminescent display, applicable under an inert gas environment, the package method comprising at least:
providing a panel, on which an organic electro-luminescent display is disposed;
providing a lamination plate, which has at least one trench formed at an edge thereon;
forming a frame sealant interposed between the panel and the lamination plate; and
performing an alignment and lamination process on the panel and the lamination plate.

[c2] 2. The package method according to claim 1, wherein the step of forming the frame sealant includes coating a sealing agent on the panel.

[c3] 3. The package method according to claim 1, wherein the step of forming the frame sealant includes coating a sealing agent on the lamination plate.

[c4] 4. The package method according to claim 1, further comprising a step of controlling an amount of a sealing agent by gas pressure adjustment for forming the frame sealant.

[c5] 5. The package method according to claim 1, further comprising a step of controlling an amount of a sealing agent by screw thrusting for forming the frame sealant.

[c6] 6. The package method according to claim 1, wherein a UV curing resin is used for forming the frame sealant.

[c7] 7. The package method according to claim 6, further comprising a step of radiating ultra-violet light to cure the UV curing resin during the step of performing the alignment and lamination process.

[c8] 8. The package method according to claim 1, wherein a thermal curing resin is used for forming the frame sealant.

[c9] 9. The package method according to claim 7, further comprising a step of

performing a thermal process to cure the thermal curing resin during the step of performing the alignment and lamination process.

[c10] 10. The package method according to claim 1, further comprising coating a sealing agent with a pattern of dots, circles, rectangles, parallel strips, cross lines or a tree-like pattern for forming the frame sealant.

[c11] 11. The package method according to claim 1, wherein the step of providing the lamination plate further comprises forming the trench in a form of a continuous frame.

[c12] 12. The package method according to claim 1, wherein the step of providing the lamination plate further comprises forming the trench in a form of multiple broken straight trenches.

[c13] 13. The package method according to claim1, wherein the alignment process further comprises using a mechanical alignment or an optical charge-coupled device alignment.

[c14] 14. A package apparatus for an organic electro-luminescent display, comprising at least:

a panel supply system, to provide a panel comprising an organic electro-luminescent display thereon;

a sealing agent coating system, to interpose a certain amount of a sealing agent between the panel and a lamination plate;

a lamination plate supply system, to provide the lamination plate which further comprises a trench formed at a periphery thereon;

an alignment and lamination system, to align and laminate the lamination plate and the panel; and

a curing system, to cure the sealing agent.

[c15] 15. The package apparatus according to claim 14, wherein the sealing agent is coated on the panel by the sealing agent coating system.

[c16] 16. The package apparatus according to claim 14, wherein the sealing agent is coated on the lamination plate by the sealing agent coating system.

[c17] 17. The package apparatus according to claim 14, wherein the sealing agent comprises a UV curing resin.

[c18] 18. The package apparatus according to claim 17, wherein the UV curing resin is cured by ultra-violet radiation.

[c19] 19. The package apparatus according to claim 14, wherein the sealing agent comprises a thermal curing resin.

[c20] 20. The package apparatus according to claim 19, wherein the thermal curing resin is cured by a thermal process.